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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/051,073 | 01/22/2002 | Takashi Murakami | 2001P014480 | 3393 |

21254 7590 10/18/2006

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EXAMINER

PAN, YUWEN

ART UNIT PAPER NUMBER

2618

DATE MAILED: 10/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,073

Applicant(s)

MURAKAMI, TAKASHI

Examiner

Yuwen Pan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 8 rejected under 35 U.S.C. 102(e) as being anticipated by applicant admitted prior art (hereinafter AAPA).

AAPA admitted that prior art teaches a portable telephone set comprising a radio circuit for demodulating a radio signal received by antenna and transmitted via a cable; and a battery for supply power to the radio circuit, wherein the battery and the radio circuit are interconnected by the cable and wherein power from the battery is supplied via the cable to the radio circuit (see figure 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1-7, and 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (hereinafter AAPA) in view of Nakamura (US006243563B1) and Wataya (JP09046110).

Per claim 1, AAPA admitted in a prior art telephone set such as a foldable portable telephone in which comprises two housings, when the sets is in use for communication, radio signals are receive by an exclusive receiving antenna for only receiving radio signals and a transmitting and receiving antenna for transmitting and receiving radio signals, a better sensitivity one of the radio signals is detected and sent to a radio circuit via a cable (see the specification page 1), the radio circuit is located at one of the portable telephone housing (see figure 6). AAPA doesn't expressly teach a switch for selecting a better detected receiving signals. Nakamura teaches that a dedicated switch circuit for selecting a better signal between a common antenna and reception dedicated antenna. It would have been obvious to one ordinary skill in the art to combine the teaching of Nakamura with AAPA such that without such switch the portable phone is hardly to select a better signal.

Combination of AAPA and Nakamura doesn't teach that the physical location of the switch could separate from the radio circuit since AAPA shows that separated paths are established between the lower housing and upper housing for signaling and power voltage. Wataya teaches one signal cable is able to carry the load of transmitting, receiving signals, control signal and power voltage. It clearly demonstrated that two electronic components are able to function normally regardless the physical location of them. For example, the switch 8 is

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controlled by the power supply section 9 in which is operating based on the direct current voltage supplied (battery) from the body 3 that is connect to the body where the switch located via a single coaxial cable (see the translation of Wataya 17). It would have been obvious to one ordinary skill in the art to combine the teaching of Wataya with the combination of AAPA and Nakamura such that two electronic components are able to function normally regardless the physical location (as two housings of a foldable phone) of them.

Same arguments apply, *mutatis mutandis*, to claim 2, 3, 4, and 5.

Per claims 6, and 14, Wataya further teach that the radio circuit and the cable are connected in parallel via coils and capacitors (see figure 1 and items 10, 17 and 32), and power from the battery is supplied via the coil side to the radio circuit (see item 22), and a radio signal received by either one of the antennas is transmitted via the capacitor side to the radio circuit. Per claims 7 and 15-18, Wataya further teach that the cable is a coaxial cable (see figure 1 and item 32).

Per claim 7, Wataya further teaches that the switch and the radio circuit are connected by a coaxial cable.

Same arguments apply, *mutatis mutandis*, to claims 15-18.

Per claim 9, AAPA discloses a portable telephone set comprising: a first housing provided with a first terminal and a second terminal to be connected with external antenna and a second external antenna, and a second housing electrically connected via a coaxial cable and

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mechanically connected with the first housing, wherein the second housing comprising: a radio circuit connected with the coaxial cable, for processing a radio signal to be transmitted supplying the processed radio signals to at least one of a first internal antenna and a second internal antenna and processing the received radio signal; a control circuit connected with the coaxial cable, for outputting the switching signal on the basis of the received signal level by the external antenna.

AAPA doesn't expressly teach a switch for selecting a better detected receiving signals. Nakamura teaches that a dedicated switch circuit for selecting a better signal between a common antenna and reception dedicated antenna. It would have been obvious to one ordinary skill in the art to combine the teaching of Nakamura with AAPA such that without such switch the portable phone is hardly to select a better signal.

Combination of AAPA and Nakamura doesn't teach that the physical location of the switch could separate from the radio circuit since AAPA shows that separated paths are established between the lower housing and upper housing for signaling and power voltage, the radio circuit connected with the coaxial cable via a capacitance and a DC power supply connect via an inductance to the coaxial cable, wherein the radio signal is transmitted/received and the DC power is supplied via the coaxial cable. Wataya teaches that radio circuit connected with the coaxial cable via a capacitance and a DC power supply connect via an inductance to the coaxial cable (see figure 1 and item 10, 17, 24, 32) and one signal cable is able to carry the load of transmitting, receiving signals, control signal and power voltage. It clearly demonstrated that two electronic components are able to function normally regardless the physical location of them. For example, the switch 8 is controlled by the power supply section 9 in which is operating based on the direct current voltage supplied (battery) from the body 3 that is connect to the body where the

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switch located via a single coaxial cable (see the translation of Wataya 17). It would have been obvious to one ordinary skill in the art to combine the teaching of Wataya with the combination of AAPA and Nakamura such that two electronic components are able to function normally regardless the physical location (as two housings of a foldable phone) of them.

Same arguments apply, *mutatis mutandis*, to claims 10, 11, and 12.

Per claim 13, AAPA further teaches that operations of internal antennas are stopped when the external antenna are connected to the first terminal and the second terminal (see spec. page 3 and 4).

Same arguments apply, *mutatis mutandis*, to claims 19-21.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yuwen Pan whose telephone number is 571-272-7855. The examiner can normally be reached on 8-5 M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anderson D. Matthew can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Yuwen Pan
October 6, 2006



MATTHEW ANDERSON
SUPERVISORY PATENT EXAMINER